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Sustainable Intensification of Cocoa Farming Systems in West and Central Africa: the Iita R4D Experience

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Abstract

In West and Central Africa, recent developments suggest the potential for transformative productivity gains in cocoa farming systems through sustainable agricultural intensification. The total population of the sub region is over 300 million. This is expected to exceed 600 million by 2040 with approximately two-thirds in urban environments. Feeding this rapidly growing urban population will be a challenge. Cocoa contributes substantially to the agricultural foreign earnings in West Africa, plays a major role in providing food for over 2 million households, and is also one of the most extensive production systems in the landscape. Historically, smallholder cocoa farmers have grown the sector through expansion into new regions with abundant forest resources. This is no longer feasible as most of the West African Guinea rain forest has been replaced by agriculture. In order to conserve the remaining forest remnants while addressing social and economic demands for development and food security, it is essential that a new paradigm of growth be developed for the cocoa sector. While progress made by countries like Côte d'Ivoire, Cameroon, Ghana, and Nigeria are laudable, the sustainability of this growth is being questioned and policy reforms are expected. Using participatory and on-farm research approaches IITA's R4D in the cocoa sector across the humid tropics of West Africa is helping to build a productive, efficient and growing cocoa sector where both male and female farmers invest in land sparing technologies provided by a vibrant and responsive private sector enabling a pathway to a middle income status for producers. Together with its partners, IITA is developing sustainable cocoa intensification and diversification strategies for climate smart cocoa farming systems that improve livelihoods, strengthen service provision in farmer-based organisations and reduce ecosystem degradation. Expansion of cocoa is researched by introducing cocoa into degraded land such as already and still used cropland and sites abandoned near homesteads. Cocoa/food crop intercropping systems can be an option to recover production, reduce maintenance labour (weeding), and rehabilitate degraded areas into forest like perennial systems. Critical aspects of cocoa establishment such as shading and irrigation in the dry season are key issues tackled in farmer participatory approaches. IITA's role is knowledge development, coaching, capacity building, introducing innovations and actionable tools for cocoa farming households.

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